

### REMARKS

This Amendment and Response is responsive to a non-final Office Action mailed August 11, 2004.

Claims 2-8, 11-15, 17-23, 25, 27-29, 33-34, 36-49, 51-56, 58-70, 72-76, 78-82, 84-90, and 92-100 remain pending in the application. Claims 3, 4, 11, 31, and 41 have been cancelled in this Response. Claims 2, 12, 17, 27, 38, 47, 48, 58, 61, 75, 78, and 97 have been amended in this Response. The foregoing amendments are supported in the specification and claims as filed. The foregoing amendments add no new matter.

Pending claims 2, 5-8, 12-15, 17-23, 25, 27-29, 33-34, 36-40, 42-49, 51-56, 58-70, 72-76, 78-82, 84-90, and 92-100 have been rejected.

Pending claims 2, 12, 13, 17-21, 36-40, 49, 51, 52, and 75 have been rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,299,810 to Pierce *et al.* (hereinafter, Pierce). Pending claim 27 has been rejected under 35 U.S.C. § 102(b) as being unpatentable over Yamakita *et al.*, "Tele-Virtual Reality of Dynamic Mechanical Model," Proceedings of the 1992 IEEE/RSJ Int'l Conf. on Intelligent Robots and Systems, Raleigh, NC July 7-10, 1992 (hereinafter, Yamakita). Pending claim 22 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pierce. Pending claims 5, 7, 23, 28, 29, 42-48, 53-56, 58-70, 72-74, 76, 78-82 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pierce in view of Yamakita. Pending claims 6, 8, 14, 15, 25, 33, 34, and 89 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pierce in view of Ouhyoung *et al.*, "A Low-Cost Force Feedback Joystick and its Use in PC Video Games," IEEE Transactions on Consumer Electronics, Vol. 41, No. 3, August 1995, pages 787-794 (hereinafter Ouhyoung), and Kelley *et al.*, "MagicMouse: Tactile and Kinesthetic Feedback in the Human-Computer Interface Using an Electromagnetically Actuated Input/Output Device," (hereinafter, Kelley). Pending claims 84-88, 90, and 92-100 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Pierce and Yamakita as applied to claim 58, and further in view of Ouhyoung and Kelley.

Applicants respectfully traverse the Examiner's rejections. Reconsideration of the present application is respectfully requested in view of the foregoing amendment and the following remarks.

Applicants respectfully requests that a timely notice of allowance be issued in this case.

**I. Withdrawal of Finality of Previous Rejection**

Applicants appreciate the Examiner's reconsideration of the finality of the rejection of the Final Office Action mailed August 27, 2003. Applicants note that the Examiner considered the Applicants' request persuasive, and has withdrawn the finality of that action. Applicants note that the Examiner has made new rejections in the Non-Final Office Action mailed August 11, 2004 in view of Pierce, Ouhyoung, and Yamakita.

**II. Claims 2, 12, 13, 17-21, 36-40, 49, 51, 52, and 75**

Pending claims 2, 12, 13, 17-21, 36-40, 49, 51, 52, and 75 have been rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,299,810 to Pierce. Pending claims 2, 12, 17, 37, 38, and 75 have been amended in this Response. To reject a claim as anticipated under 102(b), the reference must teach every element of the claimed invention either explicitly or impliedly. Any element not directly taught must be inherently present. See, MPEP § 2131. The rejection is traversed because the cited reference does not teach every element of the claimed invention.

For example, the system claimed in pending claim 2, as amended, comprises "a first interface device capable of providing a first computer input, said first interface device comprising an actuator capable of providing tactile sensations in response to a haptic feedback signal." The Pierce patent does not teach an interface device capable of providing a computer input and comprising an actuator capable of providing tactile sensations in response to a haptic feedback signal. Accordingly, the Pierce patent does not teach every element of the claimed invention. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claim 2.

In pending claim 12, as amended, the Applicants claim a system comprising a “human/computer interface means, wherein said human/computer interface means comprises an actuator means.” The Pierce patent does not teach a human/computer interface means comprising an actuator means. Accordingly, the Pierce patent does not teach every element of the claimed invention. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claim 12.

Pending claims 13 and 49 depend from claim 12. Accordingly, for at least the reasons stated above in relation to claim 12, claims 13 and 49 are allowable as well. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claims 13 and 49.

In pending claim 17, as amended, the Applicants claim a method comprising “receiving input information at [a] second computer from a haptic feedback device; and causing a tactile sensation signal to be provided to said haptic feedback device from said second computer.” The Pierce patent does not teach a haptic feedback device from which input information may be received and to which a tactile sensation signal may be provided. Accordingly, the Pierce patent does not teach every element of the claimed invention. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claim 17.

Pending claims 18-21, 51, and 52 depend from claim 17. Accordingly, for at least the reasons stated above in relation to claim 17, claims 18-21, 51, and 52 are allowable as well. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claims 18-21, 51, and 52.

In pending claim 38, as amended, the Applicants claim a method comprising “causing a haptic feedback signal to be sent to a second haptic feedback device from [a] second computer...wherein said haptic feedback signal causes said second haptic feedback device to output a force; [and] sending second computer information ...from said second computer over a network, wherein said second computer information comprises position information describing a position of a manipulandum of [said] second haptic feedback device.” The Pierce patent does not teach a haptic feedback device that can output a force, wherein the haptic feedback device comprises a manipulandum, the

position of which a computer can describe. Accordingly, the Pierce patent does not teach every element of the claimed invention. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claim 38.

Pending claims 36, 37, 39, and 40 depend from claim 38. Accordingly, for at least the reasons stated above in relation to claim 38, claims 36, 37, 39, and 40 are allowable as well. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claims 36, 37, 39, and 40.

In pending claim 75, as amended, the Applicants claim a method comprising “receiving first information at a first computer from a second computer over a network comprising haptic feedback information and position information...wherein said first computer repeatedly provides a haptic feedback signal based at least in part on said haptic feedback information to a haptic feedback device.” The Pierce patent does not teach a first computer receiving haptic feedback information from which the first computer may base a haptic feedback signal, wherein the haptic feedback information is received from a second computer. Accordingly, the Pierce patent does not teach every element of the claimed invention. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claim 75.

### **III. Claim 27**

Pending claim 27 has been rejected under 35 U.S.C. § 102(b) as being unpatentable over Yamakita. Pending claim 27 has been amended in this Response. The rejection is traversed because the cited reference neither teaches nor suggests every element of the claimed invention.

In pending claim 27, as amended, the Applicants claim a method comprising “enabling first information comprising an indication of movement of a first manipulandum coupled to a first computer and first feel sensation information indicating a type of force sensation to be output over said computer network to a second manipulandum coupled to a second computer.” The Yamakita reference does not teach outputting information comprising an indication of movement of a first manipulandum coupled to a first computer and first feel sensation information indicating a type of force

sensation to be output over a computer network to a second manipulandum coupled to a second computer. Accordingly, the Yamakita reference does not teach every element of the claimed invention. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claim 27.

#### **IV. Claim 22**

Pending claim 22 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pierce. To establish a prima facie case of obviousness, there must be some suggestions or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Further, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See, MPEP 2142.

Pending claim 22 depends from claim 17. In pending claim 17, the Applicants claim a method comprising “receiving input information at [a] second computer from a haptic feedback device; and causing a tactile sensation signal to be provided to said haptic feedback device from said second computer.” The Pierce patent does not teach a haptic feedback device from which input information may be received and to which a tactile sensation signal may be provided. Accordingly, the Pierce patent does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 22.

#### **V. Claims 5, 7, 23, 28, 29, 42-48, 53-56, 58-70, 72-74, 76, and 78-82**

Pending claims 3-5, 7, 11, 23, 28, 29, 41-48, 53-56, 58-70, 72-74, 76, 78-82 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pierce in view of Yamakita. Pending claims 47, 48, 58, 61, and 78 have been amended in this Response.

In pending claim 58, as amended, the Applicants claim a method for providing haptic feedback using a server computer over a network. The Examiner has stated “Pierce *et al.* does not illustrate ‘a server computer over a network.’” (Non-Final Office Action

mailed August 11, 2004, page 7, paragraph 6—page 8, paragraph 1.) The Examiner also stated that “Yamakita *et al.* illustrates in Figure 1 two sites Site 1 & 2 remote to each other transmitting and receiving haptic information to and from a satellite above where it is clear that the satellite functions as a server computer between the two computers.” (*Id.*) However, the Applicants disagree with the Examiner’s assertion that the satellite functions as a server computer between the two computers. The satellite shown in Figure 1 of the Yamakita reference is not a server; it merely passes along any data it receives from Site 1 to Site 2, and vice versa. Accordingly, the combination of the Pierce patent with the Yamakita reference does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 58.

Pending claims 59-70 depend from claim 58. Accordingly, for at least the reasons stated above in relation to claim 58, claims 59-70 are allowable as well.

In pending claims 42-44, and 53-56 the Applicants claim systems and methods comprising a accessing, communicating with, providing information to, or receiving information from a server or a server computer. For at least the reasons stated above with respect to claim 58, the combination of the Pierce patent with the Yamakita reference fails to teach a server or a server computer. Thus the Applicants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claims 42-44, and 53-56.

Pending claim 5 depends from claim 2, and pending claim 7 depends from claim 5. In pending claim 5, the Applicants claim a system comprising a “first interface device includ[ing] a user manipulatable object for receiving input from [a] user, said user manipulatable object being movable in two degrees of freedom.” The Examiner has stated that the Pierce patent at Figure 2, item 62 shows a user manipulatable object being movable in two degrees of freedom. (Non-Final Office Action mailed August 11, 2004 at page 8, paragraph 3.) However, as shown in Figure 2 of the Pierce patent, item 62 is a “steering handle.” A steering handle is an object with a single (rotary) degree of freedom.

Accordingly, the combination of the Pierce patent with the Yamakita reference does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claims 5 and 7.

Pending claims 23 depends from claim 21, which, in turn, depends from claim 17. In pending claim 23, the Applicants claim a method comprising “generating an image to be displayed on a visual display of said computer, ...said images includ[ing] displaying a first graphical object controlled by a user of [a] first haptic feedback device, and displaying a second graphical object controlled by a user of a second haptic feedback device, ...wherein said first and second graphical objects are displayed in a web page.” The Examiner has stated that “the combination of Pierce and Yamakita *et al.* suggest a method ...wherein said first and second graphical objects are displayed in a web page is viewed as an obvious feature of a network because the window opened up is considered the web page when talking to a remote user.” (Non-Final Office Action mailed August 11, 2004 at page 9, paragraph 5—page 10, paragraph 1.) However, neither the Pierce patent nor the Yamakita reference teaches anything related to opening windows or web pages. Accordingly, the combination of the Pierce patent with the Yamakita reference does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 23.

Pending claims 28 and 29 depend from claim 27. In pending claim 27, as amended, the Applicants claim a method comprising “enabling first information comprising an indication of movement of a first manipulandum coupled to a first computer and first feel sensation information indicating a type of force sensation to be output over said computer network to a second manipulandum coupled to a second computer.” Neither the Pierce patent nor the Yamakita reference teaches outputting information comprising an indication of movement of a first manipulandum coupled to a first computer and first feel sensation information indicating a type of force sensation to

be output over a computer network to a second manipulandum coupled to a second computer. Accordingly, the combination of the Pierce patent with the Yamakita reference does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claims 28 and 29.

Pending claim 82 depends from claim 79, which, in turn, depends from claim 75. In pending claim 82, the Applicants claim a method comprising using “first information to repeatedly update a visual display running on [a] first computer, and wherein said first computer repeatedly provides a haptic feedback signal ...to a haptic feedback device...[that] outputs a tactile sensation based, at least in part, on said haptic feedback signal and correlated with said updated visual display...wherein said visual display is updated at a rate substantially faster than said tactile sensation.” The Examiner has stated that the abstract of the Yamakita reference teaches updating a visual display at a rate substantially faster than a tactile sensation. (Non-Final Office Action mailed August 11, 2004 at page 12, paragraph 3.) However, the Yamakita reference does not pertain to a visual display, and the abstract thereof does not mention updating a visual display at a rate substantially faster than a tactile sensation. Accordingly, the combination of the Pierce patent with the Yamakita reference does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 82.

With regard to pending claims 45-48, 72-74, 76, and 78-81, the Examiner has stated that “It would have been obvious...to modify the Pierce *et al.* apparatus ...as taught by Yamakita because the feature of being able to play the game with other players at any location such as Japan and USA would clearly be desirable and therefore motivational to all users.” (Non-Final Office Action mailed August 11, 2004, page 7, paragraph 6—page 8, paragraph 1.) However, the Applicants disagree with the Examiner’s assertion that there is a motivation to combine the teachings of the Pierce patent with the Yamakita reference. The Pierce patent describes only embodiments where one or more participants are



playing a game all in the same location, such as at an arcade. The Pierce patent does not indicate that it would be desirable for a plurality of players of a game to be located anywhere but very close to one another.

Additionally, the Yamakita reference teaches away from forming such a combination with the Pierce patent. “If [a] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” See, MPEP §2143.1, and *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). The author of the Yamakita reference notes that, “a stability issue due to time delays arises in the system.” (Yamakita at page 1103, section “1 Introduction,” second paragraph.) A time delay in a head-to-head simulation where a plurality of game players are able to communicate with each other while playing a simulated game would be unacceptable. For example, in the gaming embodiment described in the Pierce patent, a time delay could cause the undesirable effect of a first user seeing or feeling an impact caused by a collision of a simulated projectile fired by a second player sitting next to him after the first player informs the second player that the collision has occurred. Likewise, in a motor vehicle racing game, a time delay could cause a first player who has “won” a race on his or her screen to finish the simulation after a second player sitting next to him tells the first player that the second player has lost. Accordingly, there is no motivation to combine the teachings of the Pierce patent with the Yamakita reference. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claims 45-48, 72-74, 76, and 78-81.

#### **VI. Claims 6, 8, 14, 15, 25, 33, 34, and 89**

Pending claims 6, 8, 14, 15, 25, 33, 34, and 89 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pierce in view of Ouhyoung and Kelley.

In pending claim 89, the Applicants claim a device comprising “a local controller, separate from and communicating with [a] first computer [in communication with a network], ...said local controller receiving haptic feedback data from said first computer,

...wherein said haptic feedback data ...[is] derived using information received by said first computer from a second computer in communication with said network.” As the Examiner has stated, “Pierce *et al.* does not illustrate the use of, ‘a local controller, separate from and communicating with said first computer, and ...receiving haptic feedback data from said first computer.’ Ouhyoung *et al.* teaches a local controller with the above claim features in Figure 3b and note also used in a PC video game.” (Non-Final Office Action mailed August 11, 2004, page 13, paragraphs 1-2.) However, the data received by the local controller shown in Figure 3b of the Ouhyoung reference is not “derived using information received by the first computer from a second computer in communication therewith over a network. Neither the Pierce patent, nor the Ouhyoung or Kelley references teach a local controller separate from and communicating with a first computer that receives from the first computer haptic feedback data derived using information received from a second computer. Accordingly, the combination of the Pierce patent with the Ouhyoung and Kelley references does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 89.

Pending claim 6 depends from claim 2. In pending claim 6, the Applicants claim a system comprising a “first interface device includ[ing] a local controller that communicates with [a] first computer, ...said first interface device comprising an actuator capable of providing tactile sensations in response to a haptic feedback signal provided by said first computer, ...said haptic feedback signal based at least in part on information received from a second computer.” For reasons described above with respect to pending claim 89, neither the Pierce patent, nor the Ouhyoung or Kelley references teach a first interface device including a local controller that communicates with a first computer, and an actuator capable of providing tactile sensations in response to a haptic feedback signal based at least in part on information received from a second computer. Accordingly, the combination of the Pierce patent with the Ouhyoung and Kelley references does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to

establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 6.

Pending claim 8 depends from claim 6. Accordingly, for at least the reasons stated above in relation to claim 6, claim 8 is allowable as well.

Pending claims 14 and 15 depend from claim 12. In pending claim 12, the Applicants claim a system comprising a “second computer means ...comprising means for interpreting...feel sensation information repeatedly received from [a] first computer means over [a] network means, ...and [means for] causing [an] actuator to generate a physical feel sensation at [a] human/computer interface means using said feel sensation information.” Neither the Pierce patent, nor the Ouhyoung or Kelley references teach a second computer means comprising means for interpreting feel sensation information received from a first computer means over a network, and means for causing an actuator to generate a physical feel sensation at a human/computer interface means using the feel sensation information. Accordingly, the combination of the Pierce patent with the Ouhyoung and Kelley references does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claims 14 and 15.

Pending claim 25 depends from claim 17. In pending claim 17, the Applicants claim a method comprising “receiving first computer information from a first computer at a second computer over a network, wherein said first computer information comprises information representing a position of a user manipulatable object; generating an image to be displayed on a visual display of said second computer; receiving input information at said second computer from a haptic feedback device; and causing a tactile sensation signal to be provided to said haptic feedback device from said second computer, said tactile sensation signal being based, at least in part, on said first computer information and said input information, wherein said haptic feedback signal causes said haptic feedback device to output haptic feedback.”

Neither the Pierce patent, nor the Ouhyoung or Kelley references teach a haptic feedback device capable of providing input information to a second computer, of receiving

from the second computer a tactile sensation signal based, at least in part, on first computer information from a first computer, and of outputting haptic feedback in response to being provided with the tactile sensation signal. Accordingly, the combination of the Pierce patent with the Ouhyoung and Kelley references does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 25.

Pending claims 33 and 34 depend from amended claim 27. In pending claim 27, as amended, the Applicants claim a method comprising “enabling first information comprising an indication of movement of a first manipulandum coupled to a first computer and first feel sensation information indicating a type of force sensation to be output over said computer network to a second manipulandum coupled to a second computer.” Neither the Pierce patent, nor the Ouhyoung or Kelley references teach outputting information comprising an indication of movement of a first manipulandum coupled to a first computer and first feel sensation information indicating a type of force sensation to be output over a computer network to a second manipulandum coupled to a second computer. Accordingly, the combination of the Pierce patent with the Ouhyoung and Kelley references does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claims 33 and 34.

## **VII. Claims 84-88, 90, 92-100**

Pending claims 84-88, 90, and 92-100 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Pierce and Yamakita as applied to claim 58, and further in view of Ouhyoung and Kelley. Pending claim 97 has been amended in this Response.

In pending claim 97, as amended, the Applicants claim a method comprising “enabling the execution of a computer-gaming simulation on a plurality of client computers, each of said plurality of client computers in communication with the Internet.” The

Examiner has stated that the term “Internet” should be broadly read to be any network, and that Figure 1 of the Yamakita reference teaches “each of said plurality of client computers in communication with the Internet.” (Non-Final Office Action mailed August 11, 2004, page 14, paragraph 4.) However, the Applicants disagree with this statement, as Figure 1 of the Yamakita reference merely teaches two controllers in communication via a satellite that passes along information between them. Neither the Pierce patent, nor the Yamakita, Ouhyoung, or Kelley references teach enabling a plurality of client computers in communication with the Internet to execute a computer-gaming simulation. Accordingly, the combination of the Pierce patent with the Yamakita, Ouhyoung, and Kelley references does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claim 97.

Pending claims 92-96 and 98-100 depend from claim 97. Accordingly, for at least the reasons stated above in relation to claim 97, claims 92-96 and 98-100 are allowable as well.

Pending claims 84-88 and 90 depend from claim 89. In pending claim 89, the Applicants claim a device comprising “a local controller, separate from and communicating with [a] first computer [in communication with a network], ...said local controller receiving haptic feedback data from said first computer, ...wherein said haptic feedback data ...[is] derived using information received by said first computer from a second computer in communication with said network.” Neither the Pierce patent, nor the Yamakita, Ouhyoung or Kelley references teach a local controller separate from and communicating with a first computer that receives from the first computer haptic feedback data derived using information received from a second computer. Accordingly, the combination of the Pierce patent with the Yamakita, Ouhyoung and Kelley references does not teach every element of the claimed invention. Thus, the Applicants respectfully assert that the Examiner has failed to establish a prima facie case of obviousness, as is required by MPEP §2142, and respectfully request that the Examiner withdraw the rejection of claims 84-88 and 90.

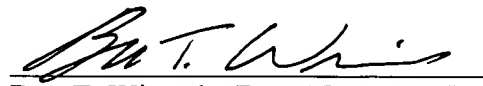
**VIII. Conclusion**

Applicants respectfully submit that claims 2, 5-8, 12-15, 17-23, 25, 27-29, 33-34, 36-40, 42-49, 51-56, 58-70, 72-76, 78-82, 84-90, and 92-100 are allowable. Thus, the Applicants respectfully solicit the issuance of a Notice of Allowance for all pending claims.

Should the Examiner have any comments, questions or suggestions of a nature necessary to expedite the prosecution of the application, he is courteously requested to telephone the undersigned at the number listed below.

Respectfully submitted,

Date: 12/17/04



Bret T. Winterle (Reg. No. 54,546)  
Attorney for Applicants

KILPATRICK STOCKTON LLP  
1001 West Fourth Street  
Winston-Salem, NC 27101  
(336) 607-7405 (voice)  
(336) 734-2648 (fax)